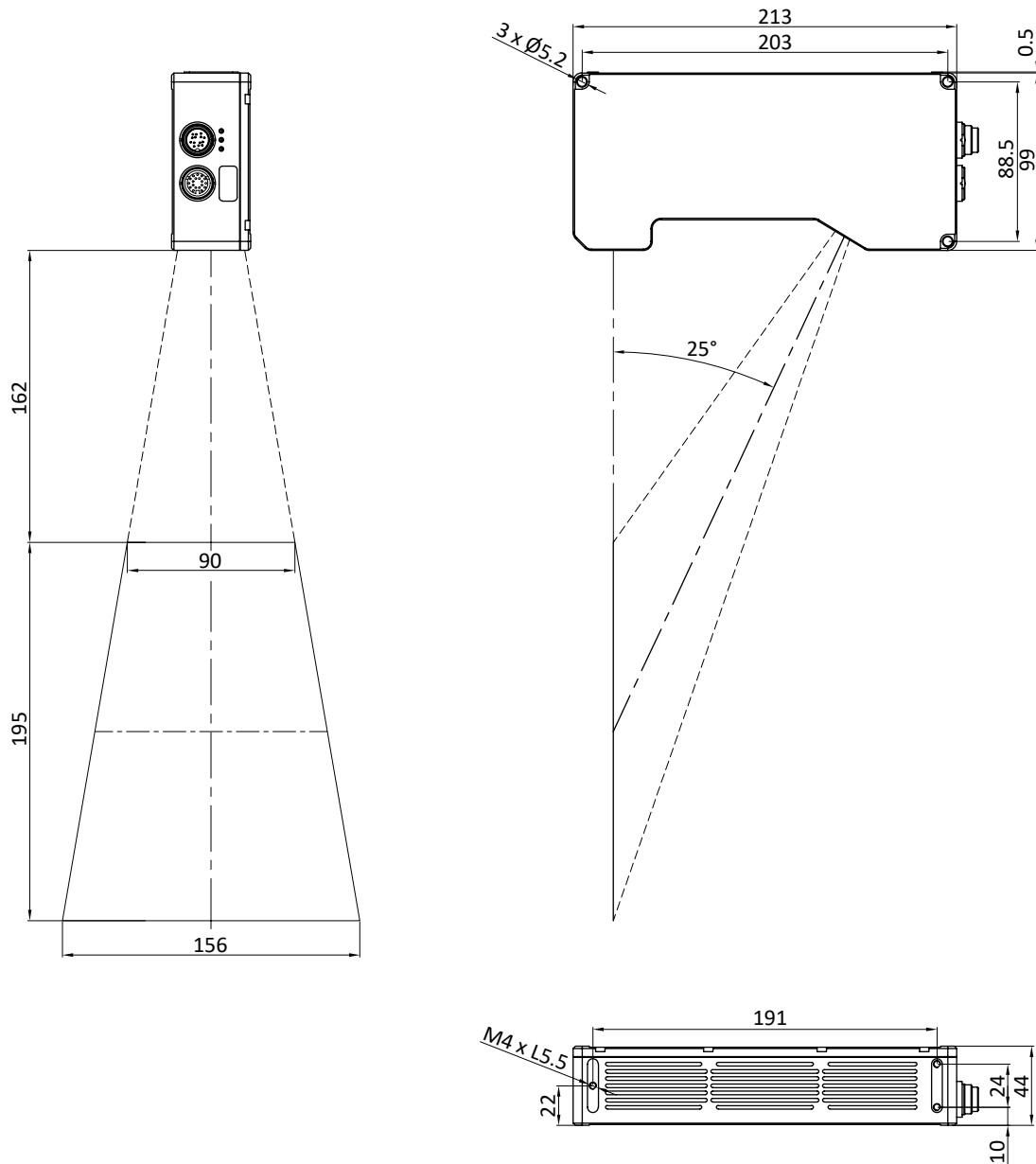


LVM2140



OPTICAL DATA

WORKING RANGE Z	162 ... 357 mm
MEASUREMENT RANGE X	90 ... 156 mm
RESOLUTION X	61.9 - 107.2 µm
LIGHT SOURCE	Laser (blue)
LASER CLASS	2, 3R

MEASUREMENT RANGE Z	195 mm
LINEARITY Z (+/- % OF MR)	0.01%
REPEATABILITY Z	1.2 µm
WAVELENGTH	405 nm
DATA POINTS	1456

APPROVALS



The information contained in this data sheet was compiled with the greatest possible care. Liability for correctness, completeness and topicality is limited to gross negligence.
ELCO Industrie Automation GmbH | Zentrale Europa | Benzstraße 7 | 71720 Oberstenfeld / Germany | Phone +49 7062 6599-260 | EN | Creation date: 15.07.24 | DS_LVM_2140_V1.0_EN

LVM2140

ENVIRONMENTAL CONDITIONS

AMBIENT TEMPERATURE	0 ... +50 °C
STORAGE TEMPERATURE	-30 ... +70 °C
WORKING HUMIDITY	20 % - 85 %RH
MAX.AMBIENT LIGHT	10000 Lux
EMC	EN 61326-1:2013(GB/T18268) EN 55011:2007-11(GB4824,group 1,A class) EN 61000-6-2:2006-03(GB/T17799.2)
SHOCK RESISTANCE	15 g/11 ms, positive and negative for X, Y and Z directions
VIBRATION RESISTANCE	10 to 55 Hz, 1.5 mm double amplitude in X, Y and Z directions, 2 hours per direction

ELECTRICAL DATA

SUPPLY VOLTAGE	24 ... 48 V DC	POWER	15 W
MEASURING RATE	270 - 5000 Hz	INPUTS	Differential Encoder, Laser Safety Enable, Trigger
OUTPUTS	2 x Digital Output, RS-485 Serial, 1 x Analog Output	INTERFACE	Modbus TCP/Profinet/ASCII

MECHANICAL DATA

HOUSING MATERIAL	Aluminium	PROTECTION CLASS	IP67 inserted and tightened
DIMENSIONS	44 x 99 x 213 mm	WEIGHT	1.05 kg
CONNECTION	M16 ; 14 - pin M16 ; 19 - pin	TEMPERATURE CHARACTERISTICS	0.01 %

COMPLEMENTARY PRODUCTS

SYNCHRONOUS CONTROLLER

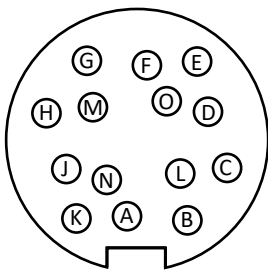
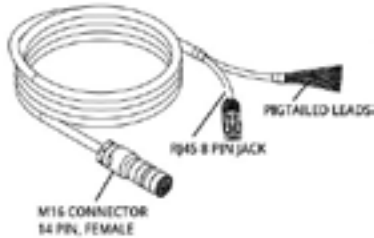
SOFTWARE

CONNECTION CABLES

ARTICLE NUMBER OF CONNECTION CABLES

POWER & ETHERNET CABLES	I/O CABLES
LVM-CP-2	LVM-CD-2
LVM-CP-5	LVM-CD-5
LVM-CP-10	LVM-CD-10
LVM-CP-15	LVM-CD-15

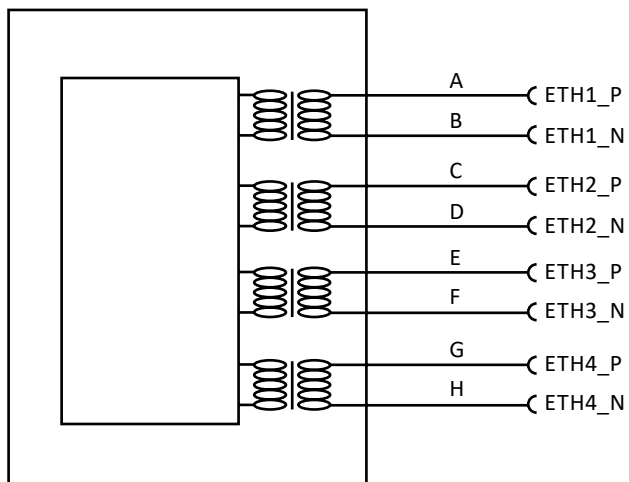
LVM2140



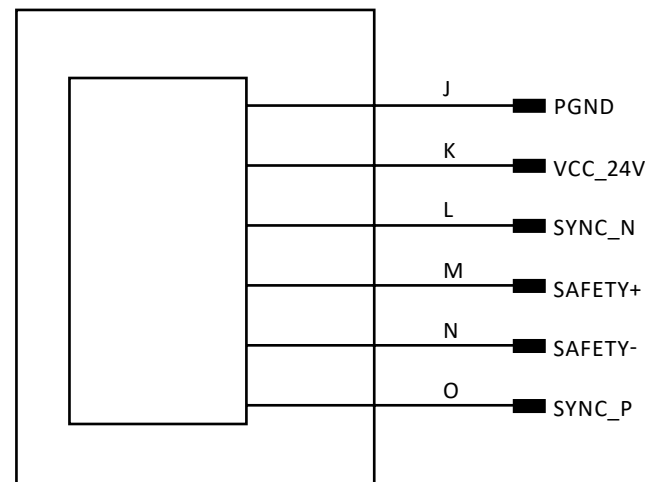
THE POWER & ETHERNET CORDSET

MARK	PIN	COLOR	DESCRIPTION
ETH1_P	A	Red	Gigabit Ethernet interface
ETH1_N	B	Red/White	
ETH2_P	C	Blue	
ETH2_N	D	Blue/Black	
ETH3_P	E	Black	
ETH3_N	F	Black/White	
ETH4_P	G	Green	
ETH4_N	H	Green/Black	
PGND	J	Brown Brown/Black	Power-
VCC_24V	K	White White/Black	Power+
SYNC_N	L	Orange	Reserved interface
SYNC_P	O	Orange/Black	Reserved interface
SAFETY+	M	Yellow	Laser safety+
SAFETY-	N	Yellow/Black	Laser safety-

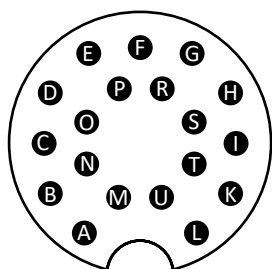
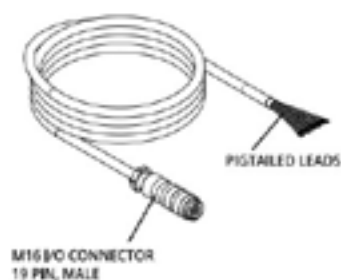
CONNECTION DIAGRAM, ETHERNET



CONNECTION DIAGRAM, POWER SUPPLY



LVM2140



INPUT & OUTPUT CORDSET			
MARK	PIN	COLOR	RESERVED INTERFACE
OUT1-	A	Red	Digital 1-
OUT1+	B	Red/White	Digital 1+
OUT2-	C	Blue	Digital 2-
OUT2+	D	Blue/Black	Digital 2+
IOUT+	E	Black	4-20mA analogue
IOUT-	F	Black/White	Gnd
EZ_N	G	Green	Encoder EZ-
EZ_P	H	Green/Black	Encoder EZ+
EB_P	I	Yellow	Encoder EB+
EB_N	K	Yellow	Encoder EB-
SERIAL2_P	M	Brown	Serial 2 input+
SERIAL2_N	N	Brown/Black	Serial 2 input-
TRIG-	O	White	Trigger signal-
TRIG+	P	White/Black	Trigger signal+
EA_P	R	Purple	Encoder EA+
EA_N	S	Purple/Black	Encoder EA-
SERIAL1_P	T	Grey	Serial 1 output+
SERIAL1_N	U	Grey/Black	Serial 1 output-

CONNECTION DIAGRAM, INPUT & OUTPUT

